

1. Title	Perform basic service work of air-conditioning and refrigeration systems									
2. Code	EMACOR201A									
3. Range	Perform basic service work of air-conditioning and refrigeration systems at installation, maintenance and servicing stations under a certain degree of instruction.									
4. Level	2									
5. Credit	5									
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <table border="0"> <tr> <td style="vertical-align: top;">6.1</td> <td style="vertical-align: top;">Functions, construction and working principles of major air-conditioning and refrigeration system equipment</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Understand the principles of refrigeration cycle ◆ Understand the functions, construction and working principles of major refrigeration system equipment </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Basic servicing methods and procedures of air-conditioning and refrigeration systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Clean and wash the air filter, evaporator and condenser ◆ Perform pressure leak check and vacuuming of refrigeration system ◆ Charge the small refrigeration system (cooling capacity below 11kW) with correct amount of refrigerant ◆ Check and ensure that the running current is normal </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in basic servicing of air-conditioning and refrigeration systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Follow the instructions to perform basic servicing of air-conditioning and refrigeration systems ◆ Understand the safety guidelines as required by the law and the code of practice to undertake the servicing of air-conditioning and refrigeration systems </td> </tr> </table>	6.1	Functions, construction and working principles of major air-conditioning and refrigeration system equipment	<ul style="list-style-type: none"> ◆ Understand the principles of refrigeration cycle ◆ Understand the functions, construction and working principles of major refrigeration system equipment 	6.2	Basic servicing methods and procedures of air-conditioning and refrigeration systems	<ul style="list-style-type: none"> ◆ Clean and wash the air filter, evaporator and condenser ◆ Perform pressure leak check and vacuuming of refrigeration system ◆ Charge the small refrigeration system (cooling capacity below 11kW) with correct amount of refrigerant ◆ Check and ensure that the running current is normal 	6.3	Professionalism in basic servicing of air-conditioning and refrigeration systems	<ul style="list-style-type: none"> ◆ Follow the instructions to perform basic servicing of air-conditioning and refrigeration systems ◆ Understand the safety guidelines as required by the law and the code of practice to undertake the servicing of air-conditioning and refrigeration systems
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7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to perform pressure leak check, vacuuming of refrigeration system and charging of refrigerant; and</p> <p>(ii) Capable to follow the code of practice safely to undertake the servicing of air-conditioning and refrigeration systems.</p>									
8. Remarks	This unit of competency is applicable to practitioners engaged in general installation, maintenance and repair of air-conditioning and refrigeration systems.									